REMARKS

Reconsideration of the subject application in view of the present amendment is respectfully requested.

By the present amendment, Claims 1-53 have been cancelled. Claims 54-103 have been added.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance, and action to that end is respectfully requested.

The Examiner rejected original claims under 35 U.S.C. §102(b) as being anticipated by de Vos, U.S. Patent No. 5,312,847 (de Vos). It is respectfully submitted that claims 54-103 are patentable over de Vos.

Specifically, claim 54 recites that: (i) the water content of the polyol component (A) ranges from 6 to 100 parts by weight per 100 parts by weight of the at least one polyol of the polyol component (A); and if the polyol component (A) contains at least one cell stabilizer in an amount of 0.01 to 1.5% by weight selected from the group consisting of alkoxylated fatty acids, ethoxylated (C_1-C_{18})-alkylphenols and ethoxylated castor oil. As explained in

the specification (see the paragraph bridging pages 7-8), with the amount of water present higher than what is necessary for foaming the composition and with the specific cell stabilizers provide for a surprising technical effect, namely that in view of the water present, the aqueous polymer dispersion is coagulated and precipitated in the foaming material and stretched in the direction to which the foam expands, which leads to an anisotropic, fiber-like structure of the foam which surprisingly increases the mechanical properties of the foam which can be adjusted differently in the various special directions. Furthermore, a surprising improvement in the fire resistance is obtained. Furthermore, because the amount of solid filler added is less and the proportion of water is greater, the viscosity of the polyol component of the inventive of the two-component foam system is appreciably lower than that of conventional foam systems. As a result, the processing is noticeably simplified since the force employed for the manual and mechanical discharge of the components of the two-component foam system, stored in separate containers, is decreased substantially.

Enclosed herewith, as Exhibit "A", are results of a test showing the advantages of the two-component foam system according to claim 54. As follows from the test results the inventive foam system which contains an

increased amount of water permits to obtain a flexible foam with an anizotropic fiber structure.

The use of alkoxylated alkylphenols or alkozylated fatty acids as a cell stabilizer accelerates the gel formation which contributes to the formation of the anizotropic fiber structure and of a set-up foam, which permits using the foam as in-situ foam.

The novel features of the present invention set forth in claim 54 are absent from de Vos. De Vos discloses a polyurethane foam system which comprises as the blowing agent water in an amount of from about 1 to about 10 parts per 100 parts by total weight of polyol (column 4, lines 58 to 63). The foam stabilizing agents disclosed in de Vos include only silicone surfactants (column 5, lines 47 to 52) but not the specific cell stabilizers referred to in claim 54.

A rejection based on U.S.C. § 102 as in the present case, requires that the cited reference disclose each and every element covered by the Claim. Electro Medical Systems S.A. v. Cooper Life Sciences, 32 U.S.P.Q. 2d 1017, 1019 (Fed. Cir. 1994); Lewmar Marine Inc. v. Barient Inc., 3 U.S.P.Q. 2d 1766,

1767-68 (Fed. Cir. 1987); Verdegaal Bros., Inc. v. Union Oil Co., 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987).

Since de Vos fails to disclose each and every feature of independent Claim 54, de Vos, as a matter of law, does not anticipate the present invention, as defined by said independent claim.

In view of the above, it is respectfully submitted that de Vos does not anticipate or make obvious the present invention a defined in Claim 54, and the present invention is patentable over de Vos.

Claims 55-103 depend on Claim 54 and are allowable for the same reasons Claim 54 is allowable and further because of specific features recited therein which, when taken alone and/or in combination with features recited in Claim 54 are not disclosed or suggested in the prior art.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawing be further amended or corrected in formal respects, in order to place in case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's amendment and the case passed issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

David Toren, Reg. No. 19,468

Dated: March 21, 2005

Sidley Austin Brown & Wood LLP
787 Seventh Avenue
New York, NY 10019
Tel.: (212) 839-7365

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail and addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 21, 2005.

David Toren

Hilti Entwicklungsgesellschaft mbH

86915 Kaufering
Tel./Phone (08191) 90-0
Fax (08191) 90-6449

Von / From: YTA
Tel: (08191)90-6474

Datum / Date: 11.03.05
Seite / Page: 1 / 4

Zur Bearbeitung:/
Action by:

EXHIBIT "A"

Zur Information:/
Information of: CEPsw, CEPfc, CEP, KS

Teilnehmer:/
Participants:

Experiments for demonstrating a surprising technical effect due to the use of a sufficient amount of a polymer dispersion (water content > 6 parts by weight per 100 parts by weight of polyol) and use of alkoxylated alkylphenols and alkoxylated fatty acids, respectively.

a) Amount of dispersion (water content)

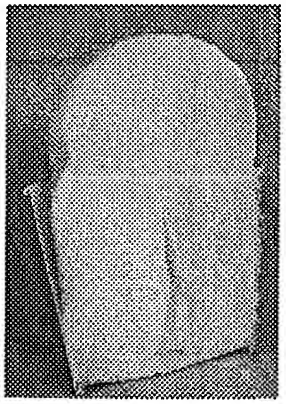
The amount of dispersion (water content) must exceed a certain level, in order to obtain the surprising effect with respect to gel formation and fiber structure as mentioned in the patent application.

The following sample formulations were used for illustration purposes:

Comparison Formulation (Example 3)
Water content 39.8 parts by weight per 100 parts by weight Pluracol

Polyol Component (A)	% by weight
Primal 2620	35,6
Pluracol E 600	34
Emulan OP 25	5
Isocyanate Component (B)	
Voranate M220	25,4

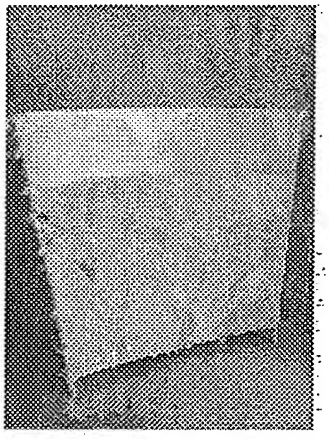
This mixture, which is already described in the patent application, provides after curing a flexible foam having a density of 71 g/l and the described fiber structure. Upon mixing the components, gel formation occurs after 30 seconds, the starting time is 80 seconds and the stopping time is about 6 minutes.



Reduced amount of dispersion, water content 5.6 parts by weight per 100 parts by weight Pluracol

Polyol Component (A)	% by weight
Primal 2620	7,2
Pluracol E 600	49,0
Emulan OP 25	7,2
Isocyanate Component (B)	
Voranate M220	36,6

The above formulation having a reduced water content and amount of dispersion, respectively, provides upon curing a very large-cellular flexible foam having a density of 105 g/l. The fiber structure as described in the above Example 3 is not observed. Upon mixing the components, no gel formation occurs, the starting time is 75 seconds, the stopping time about 5 minutes.



b) Use of alkoxylated alkylphenols or alkoxylated fatty acids

By the addition of alkoxylated alkylphenols or alkoxylated fatty acids, the above described effect of gel formation can be accelerated in such a manner that it already occurs prior to the expansion of the foam and thus leads, on the one hand, to the above described fiber formation and, on the other hand, permits the formation of a set-up foam.

The following formulations were used for illustration:

	% by weight		
Polyol Component (A)	b_1	b_2	b_3
Primal 2620	37,5	35,6	37,1
Pluracol E 600	35,8	34	35,4
Emulan OP 25		5	
Dabco DC 190			1
Isocyanate Component (B)			
Voranate M220	36,6	25,4	26,5

Density / g/l	119	71	126
Gelation time	**60**	**25**	**60**
Starting time	75	80	80
Stopping time	ca. 6 min.	ca. 6 min.	ca. 6 min.

The above examples show that by the addition of ethoxylated alkylphenol (Emulan OP 25) the gel formation can be strongly accelerated. Such an effect can not be obtained with conventional cell stabilizers on the basis of silicone oil, such as Dabco DC 190.

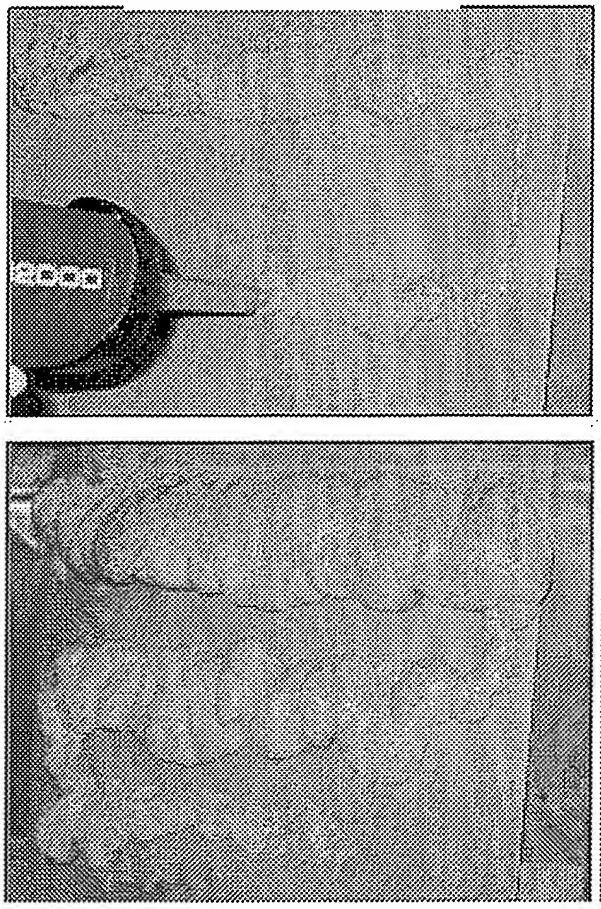
An early gel formation is particularly important for the use of the foams as in-situ foams, in order to avoid a dripping of the foam. The following pictures show the use of foams with an early gel formation (left-hand side) and without gel formation (right-hand side).

Hilti Entwicklungsgesellschaft mbH

86915 Kaufering
Tel./Phone (08191) 90-0
Fax (08191) 90-6449

Von / From: YTA
Tel: (08191)90-6474

With gel formation



Without gel formation